

FOLDER 4

- **Activity**

Resource Planning

MICROSOFT PROJECT

PERANCANGAN SUMBER ***-Activity Resource Planning***



Manpower



Apakah Sumber ??

Money



Machine



Material



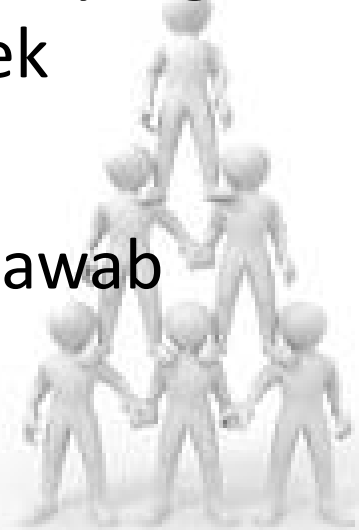
Sumber

4M

Perancangan Sumber

Kenapa perancangan sumber?

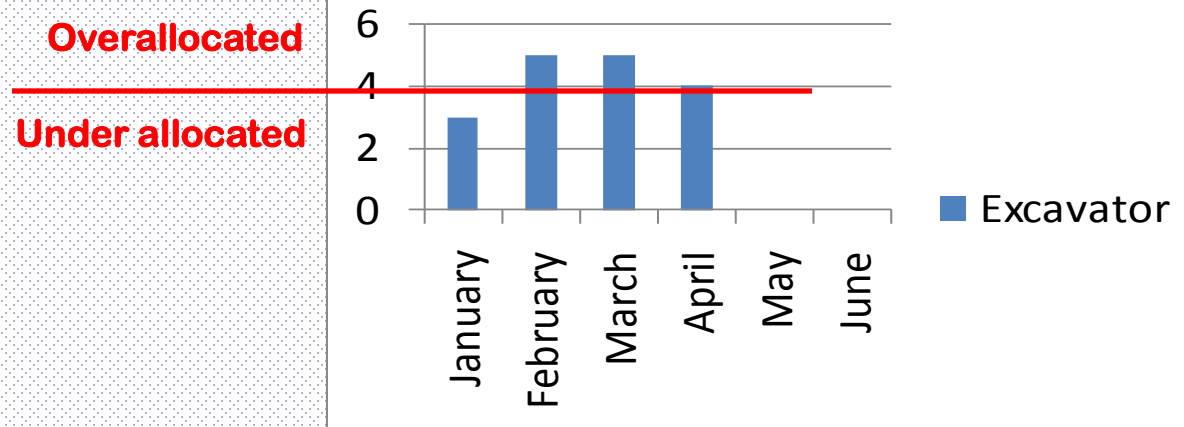
- Memastikan penggunaan sumber manusia yang paling berkesan dalam pelaksanaan projek
- Untuk menetapkan peranan & tanggungjawab pasukan projek
- Sebagai asas kepada penyediaan bajet projek



Merancang Sumber (Resource Estimate)

- **5 steps :**

1. Resource planning
2. Resource allocation
3. Resource usage – create resource histogram to monitor usage of resources
4. Resource over/under allocation
5. Resource levelling



Merancang Sumber (Resource Estimate)

Tujuan :

1. Roles & Responsibility

- Recourse Breakdown Structure (RBS)
- Responsible Assign Matrix (RAM)
- Organization Breakdown Structure (OBS)
- Job Description

2. Activity Duration Estimate (ADE)

- Effort Driven Scheduling (EDS)
- $D = Q/PR$

3. Activity Based Costing (ABC)

- Actual Cost by Contractor

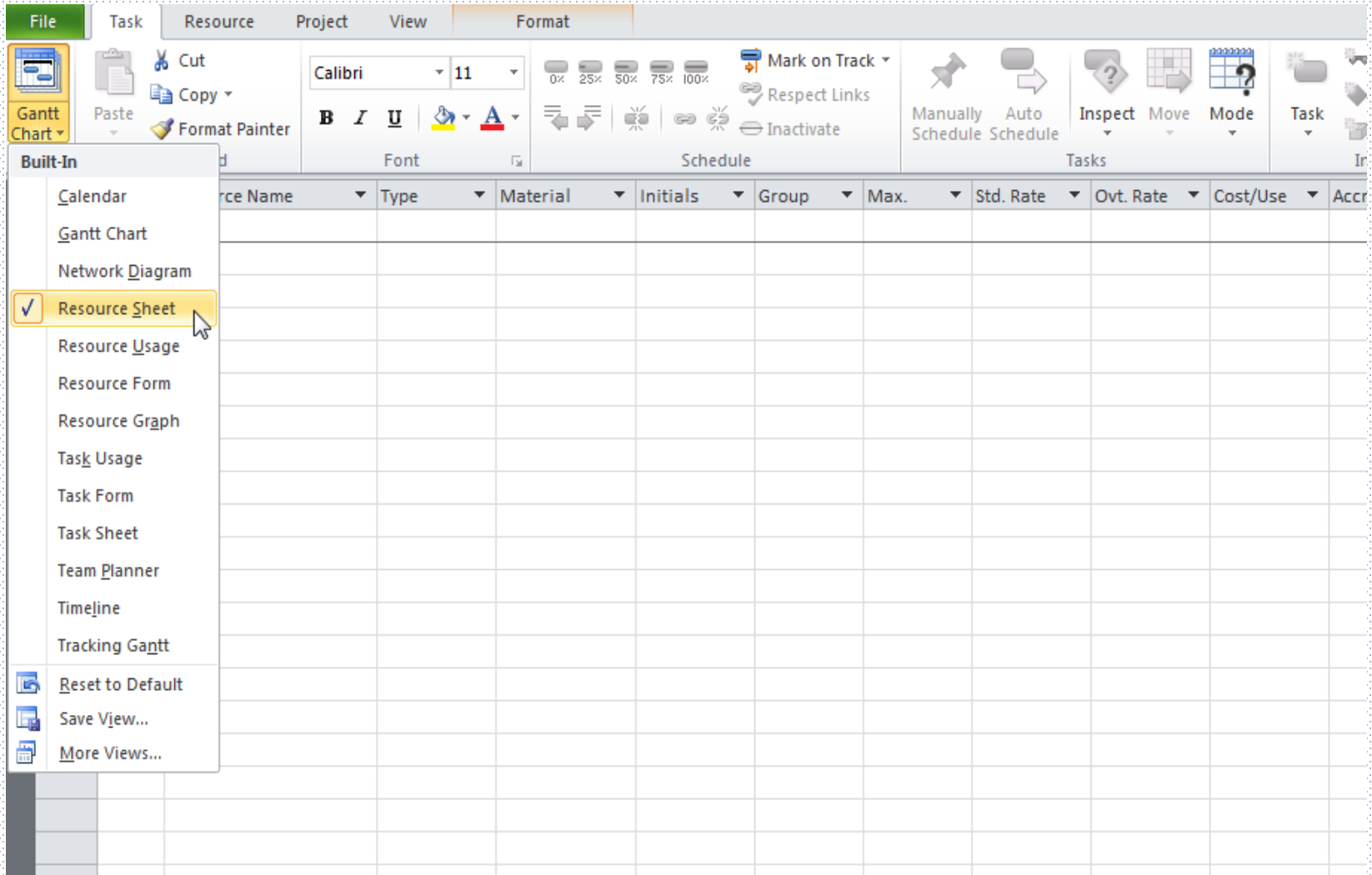


MICROSOFT PROJECT

Hands-On



Menyediakan Senarai Sumber



Menyediakan Senarai Sumber

File Task Resource Project View Format											
Gantt chart View Paste Cut Copy Format Painter Clipboard Calibri 11 B <i>I</i> <u>U</u> Font 0% 25% 50% 75% 100% Schedule Mark on Track Respect Links Inactivate Manually Schedule Auto Schedule Inspect Move Mode Task											
		Resource Name	Type	Material	Initials	Group	Max.	Std. Rate	Ovt. Rate	Cost/Use	Ac
1		Earthwork team	Work		ET		4	RM0.00/hr	RM0.00/hr	RM0.00	Pr
2		Struktur team	Work		ST		4	RM0.00/hr	RM0.00/hr	RM0.00	Pr
3		Arkitek team	Work		AT		3	RM0.00/hr	RM0.00/hr	RM0.00	Pr
4		M&E team	Work		MET		3	RM0.00/hr	RM0.00/hr	RM0.00	Pr
			Work								
			Material								
			Cost								

Menentukan Bilangan Maksima Sumber

Menyediakan Senarai Sumber

The screenshot displays the Primavera P6 software interface. The 'Resource Sheet' is visible in the background, showing a list of resources with columns for Resource Name, Type, Material, Initials, Group, Max., Std. Rate, Ovt. Rate, Cost/Use, Accrue At, and Base Ca. The 'Format' ribbon is active, and the 'Information' tab is selected, which is highlighted with a blue circle. The 'Resource Information' dialog box is open, showing the 'General' tab. The 'Resource Name' field is set to 'Earthwork team'. The 'Notes' field contains the following text:

1 team consist of :
1 excavator
4 lori
1 backpusher
4 workers
0.5 supervisor

The dialog box also includes buttons for 'Help', 'Details...', 'OK', and 'Cancel'.

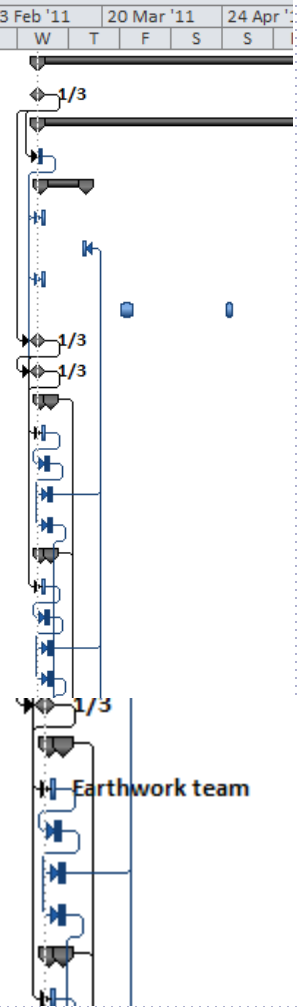
Menentukan Sumber Untuk Kerja

	Task Mode	WBS	Task Name	Duration	Start	Finish	Predecessors	Resource Names	13 Feb '11	20 Mar '11	24 Apr '11
1		1	Projek JKR - Membina 2 blok bangunan	106 days?	1 Mar '11	26 Jul '11			T	W	T
2		1.1	Projek Mula	0 days	1 Mar '11	1 Mar '11				F	S
3		1.2	Preliminaries	106 days?	1 Mar '11	26 Jul '11				S	S
4		1.2.1	Performance Bond & Insurance	1 day?	1 Mar '11	1 Mar '11	2				
5		1.2.2	Establish & Removal Site Office	9 days?	2 Mar '11	14 Mar '11					
6		1.2.2.1	Establish Site Office	1 day?	2 Mar '11	2 Mar '11	4				
7		1.2.2.2	Removal Site Office	1 day?	14 Mar '11	14 Mar '11	20FF,25FF,28FF				
8		1.2.3	Maintenance of Site Office	1 day?	2 Mar '11	2 Mar '11	6SS				
9		1.2.4	Laporan Kemajuan	88 days	25 Mar '11	26 Jul '11					
15		1.3	Land Acquisition (Blok A & B)	0 days	1 Mar '11	1 Mar '11	2				
16		1.4	Services Relocation (Blok B only)	0 days	1 Mar '11	1 Mar '11	15				
17		1.5	Blok A	3 days?	2 Mar '11	4 Mar '11					
18		1.5.1	Kerja Tanah	1 day?	2 Mar '11	2 Mar '11	4,15				
19		1.5.2	Kerja Structure	1 day?	3 Mar '11	3 Mar '11	18				
20		1.5.3	Kerja Arkitek	1 day?	4 Mar '11	4 Mar '11	19				
21		1.5.4	Kerja M&E	1 day?	4 Mar '11	4 Mar '11	19				
22		1.6	Blok B	3 days?	2 Mar '11	4 Mar '11					
23		1.6.1	Kerja Tanah	1 day?	2 Mar '11	2 Mar '11	4,16				
24		1.6.2	Kerja Structure	1 day?	3 Mar '11	3 Mar '11	23				
25		1.6.3	Kerja Arkitek	1 day?	4 Mar '11	4 Mar '11	24				
26		1.6.4	Kerja M & E	1 day?	4 Mar '11	4 Mar '11	24				
27		1.7	Completion of Cable Laying By TNB	0 days	11 Mar '11	11 Mar '11	21FS				
28		1.8	Testing & Commissioning	1 day?	14 Mar '11	14 Mar '11	27				
29		1.9	Projek Siap	0 days	26 Jul '11	26 Jul '11	3,17				

☐ Arkitek team
☒ Earthwork team
☐ M&E team
☐ Struktur team



Earthwork team



EDS – Effort Driven Scheduling

	Task Mode	WBS	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1		1	Projek JKR - Membina 2 blok bangunan	106 days?	1 Mar '11	26 Jul '11		
2		1.1	Projek Mula	0 days	1 Mar '11	1 Mar '11		
3		1.2	Preliminaries	106 days?	1 Mar '11	26 Jul '11		
4		1.2.1	Performance Bond					
5		1.2.2	Establish & Remove Site					
6		1.2.2.1	Establish Site					
7		1.2.2.2	Removal Site					
8		1.2.3	Maintenance of Site					
9		1.2.4	Laporan Kemajuan					
15		1.3	Land Acquisition (Bumi)					
16		1.4	Services Relocation					
17		1.5	Blok A					
18		1.5.1	Kerja Tanah					
19		1.5.2	Kerja Structure					
20		1.5.3	Kerja Arkitek					
21		1.5.4	Kerja M&E					
22		1.6	Blok B					
23		1.6.1	Kerja Tanah					
24		1.6.2	Kerja Structure					
25		1.6.3	Kerja Arkitek					
26		1.6.4	Kerja M & E					
27		1.7	Completion of Cable Laying by TNB	0 days	11 Mar '11	11 Mar '11	21FS+5 days, 26FS+5 d	
28		1.8	Testing & Commissioning	1 day?	14 Mar '11	14 Mar '11	27	
29		1.9	Projek Siap	0 days	26 Jul '11	26 Jul '11	3,17,22,28	

Task Information

General | Predecessors | Resources | **Advanced** | Notes | Custom Fields

Name: Kerja Tanah Duration: 1 day? ☒ Estimated

Constrain task

Deadline: NA

Constraint type: As Soon As Possible Constraint date: NA

Task type: Fixed Units ☐ Effort driven

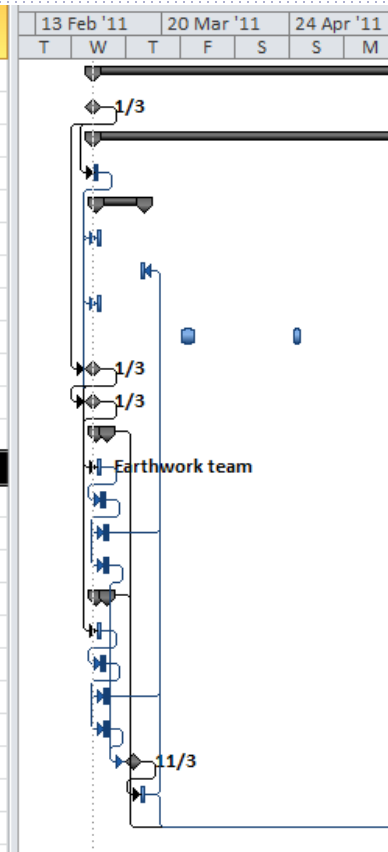
Calendar: None ☐ Scheduling ignores resource calendars

WBS code: 1.5.1

Earned value method: % Complete

☐ Mark task as milestone

Help OK Cancel



EDS – Effort Driven Scheduling

Task Name	Duration	Start	Finish	Predecessors	Resource Names
Projek JKR - Membina 2					
Projek Mula					
Preliminaries					
Performance Bond					
Establish & Remove					
Establish Site Of					
Removal Site Of					
Maintenance of Sit					
Laporan Kemajuan					
Land Acquisition (Blo					
Services Relocation (B					
Blok A					
Kerja Tanah					
Kerja Structure					
Kerja Arkitek					
Kerja M&E					
Blok B					
Kerja Tanah					
Kerja Structure					
Kerja Arkitek					
Kerja M & E					

Task Information

General

Predecessors

Resources

Advanced

Notes

Custom Fields

Name: Kerja Tanah

Duration: 1 day?

☒ Estimated

Constrain task

Deadline: NA

Constraint type: As Soon As Possible

Constraint date: NA

Task type: Fixed Units

Fixed Duration

Fixed Units

Fixed Work

☐ Effort driven

☐ Scheduling ignores resource calendars

Calendar:

WBS code:

Earned value method: % Complete

☐ Mark task as milestone

Help

OK

Cancel

Fixed Duration –
Tiada Effort Driven
(kerja sudah
ditetapkan
tempohnya).

Fixed Units –
Kuantiti sudah fixed

Fixed Work –
Effort dah
ditetapkan

Cara Memasukkan Bilangan Sumber

8		1.2.3	Maintenance of Site Office	1 day?	2 Mar '11	2 Mar '11	6SS	
9		1.2.4	Laporan Kemajuan	88 days	25 Mar '11	26 Jul '11		
15		1.3	Land Acquisition (Blok A & B)	0 days	1 Mar '11			
16		1.4	Services Relocation (Blok B only)	0 days	1 Mar '11			
17		1.5	Blok A	1.33 days?	2 Mar '11			
18		1.5.1	Kerja Tanah	0.5 days?	2 Mar '11			Earthwork team[2]
19		1.5.2	Kerja Structure	0.33 days?	2 Mar '11	2 Mar '11	18	Struktur team[3]
20		1.5.3	Kerja Arkitek	0.33 days?	2 Mar '11	3 Mar '11	19	Arkitek team[3]
21		1.5.4	Kerja M&E	0.5 days?	2 Mar '11	3 Mar '11	19	M&E team[2]
22		1.6	Blok B	3.17 days?	2 Mar '11	7 Mar '11		
23		1.6.1	Kerja Tanah	0.67 days?	2 Mar '11	2 Mar '11	4,16	Earthwork team[3]
24		1.6.2	Kerja Structure	1 day?	2 Mar '11	3 Mar '11	23	Struktur team[3]
25		1.6.3	Kerja Arkitek	1.5 days?	3 Mar '11	7 Mar '11	24	Arkitek team[2]
26		1.6.4	Kerja M & E	1 day?	3 Mar '11	4 Mar '11	24	M & E team[2]
27		1.7	Completion of Cable Laying By TNB	0 days	11 Mar '11	11 Mar '11	21FS+5 days,26FS+5 d	
28		1.8	Testing & Commissioning	1 day?	11 Mar '11	14 Mar '11	27	
29		1.9	Projek Siap	0 days	26 Jul '11	26 Jul '11	3,17,22,28	

Click EW.
[2] utk- 2
geng

Nama
team akan
tertera

[2] - ✓
{2} - x
(2) - x